

Amphibia, Anura, Hylidae, *Hypsiboas microderma* (Pyburn, 1977): First record for the state of Rondônia and new record for the state of Acre, southwestern Amazonia, Brazil

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ABSTRACT: We record for the first time the presence of *Hypsiboas microderma* in the state of Rondônia, and a new record in the state of Acre, Brazil. This treefrog is found throughout western Amazon in Brazil and no information about its distribution in Rondônia was reported previously.

The genus *Hypsiboas* includes more than 80 species distributed in the tropical Central and South America from Nicaragua to Argentina; Trinidad and Tobago (Frost 2011). For many of the known species data on geographic distribution and behavior is scarce. *Hypsiboas microderma* (Figure 1) has a wide distribution from upper Amazon Basin in southeastern Colombia, and Brazil (França and Venâncio 2010; Frost 2011) and Peru (Rodriguez and Duellman 1994; Souza and Gonzales 2006).

On 1 February 2008, one of us (MBS) found two specimens of *H. microderma* during a herpetofaunal survey in a forest fragment (09°53'45.1" S, 67°18'14.8" W, elevation 148 m), in the municipality of Senador Guiomard, state of Acre. A further specimen was found by two of us (DM and US) during herpetofaunal sampling at Estação Ecológica do Cuniã – Rondônia, into enclaves of Savanna (08°05'21.4" S, 63°28'35.8" W) on 28 July 2010.

The Brazilian Amazonian anuran fauna is very diverse with more than 220 species (Avila-Pires *et al.* 2007). However little information is available for hylid frogs of the *Hypsiboas benitezi* group (*sensu* Faivovich *et al.* 2005), which includes *Hypsiboas microderma*, which is known from type-locality Vaupés Colombia,

(01°03' N, 69°28' W) (Pyburn 1977), some localities in northern and eastern Peru (Rodriguez and Duellman 1994; Souza and Gonzales 2006) and Brazil (western Acre state [Cardoso and Vielliard 1990; Souza 2009] and Amazonas state [França and Venâncio 2010]). No specific methods for sampling stream frogs have ever been developed, with previous studies relying only on visual encounter surveys.

Hypsiboas microderma is commonly found along streams (Cardoso and Vielliard 1990; Rodriguez and Duellman 1994; Souza and Gonzales 2006; this study) but is only rarely found during herpetological surveys in the region. The collected specimens were deposited in the Coleção de Referência de Vertebrados da Universidade Federal de Rondônia, in Porto Velho, Rondônia (UFRO-H 000586), and at the Coleção Herpetológica da Universidade Federal do Acre, in Rio Branco, Acre (UFAC- 4561 and UFAc - 4734-4735). Large areas in Amazonia still need further studies on species richness and composition (Azevedo-Ramos and Galatti 2002), although gaps are rapidly being filled by fieldwork in many places (Figure 2). More research into the species' extent of occurrence is needed (Castro *et al.* 2004)



FIGURE 1. *Hypsiboas microderma*. Lateral views showing the distinctive characteristic of the yellow discs on the fingers and toes. A) specimen from Fazenda Experimental Catuaba, Municipality of Senador Guiomard, state of Acre (not collected); B) specimen from Divisor, Departamento Loreto, Peru (not collected); C) specimen from Estação Ecológica do Cuniã, municipality of Porto Velho, state of Rondônia (UFRO-H 000586). Photos by: P.R. Melo-Sampaio, M.B. Souza and D. Meneghelli.

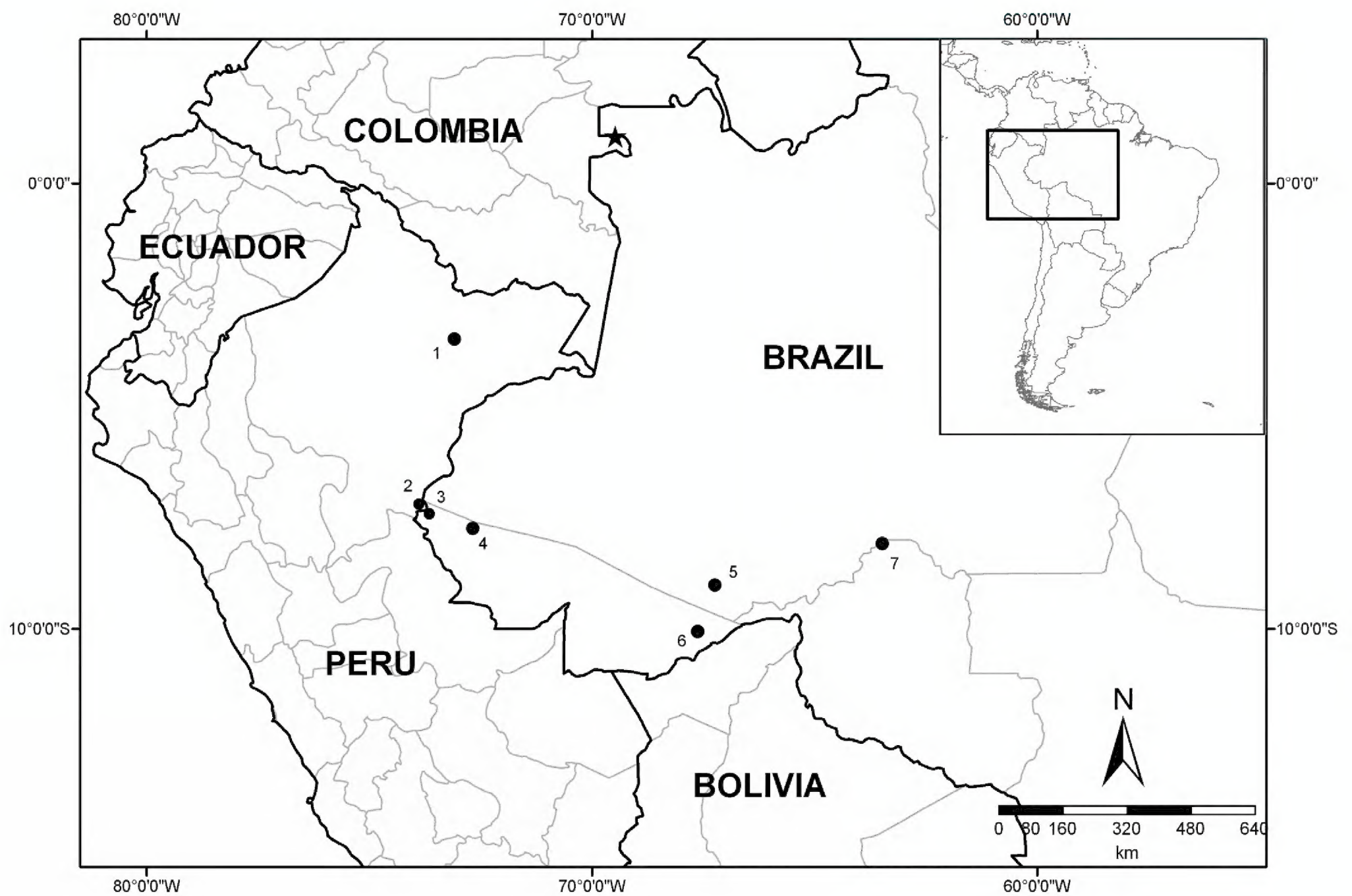


FIGURE 2. Distribution map of *Hypsiboas microderma* throughout western Amazonia. COLOMBIA: Type-locality (star): rio Vaupés, (Pyburn 1977); PERU: 1- Mazán, Loreto (Rodriguez and Duellman 1994), 2- Divisor, Loreto (Souza and Gonzales 2006). BRAZIL: 3- Parque Nacional da Serra do Divisor, Mâncio Lima, Acre (Souza 2009), 4- Cruzeiro do Sul, Acre (Cardoso and Vielliard 1990), 5- Boca do Acre, Amazonas (França and Venâncio 2010), 6- Fazenda Experimental Catuaba, Senador Guimard, Acre (this study) and 7- Estação Ecológica do Cuniã, Porto Velho, Rondônia, (this study).

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LITERATURE CITED

- Azevedo-Ramos, C. and U. Galatti. 2002. Patterns of amphibian diversity in Brazilian Amazonia: conservation implications. *Biological Conservation* 103: 103–111.
- Avila-Pires, T.C.S., M.S. Hoogmoed and L.J. Vitt. 2007. Herpetofauna da Amazônia; p. 13-43 In L.B. Nascimento and M.E. Oliveira (ed.). *Herpetologia no Brasil II*. Belo Horizonte: Sociedade Brasileira de Herpetologia.
- Cardoso, A.J. and J.M.E. Vielliard. 1990. Vocalização de anfíbios anuros de um ambiente aberto, em Cruzeiro do Sul, Estado do Acre. *Revista Brasileira de Biologia*. 50(1): 229-242.
- Castro, F., J.V. Rueda, W. Bolívar, R.A. Estupinan, M.S. Hoogmoed, and C. Gascon. 2004. *Hypsiboas microderma*. In IUCN 2011. *IUCN Red List of Threatened Species. Version 2011.1*. Electronic Database accessible at <www.iucnredlist.org>. Captured on 02 September 2011.
- Faivovich, J., C.F.B. Haddad, P.C.A. Garcia, D.R. Frost, J.A. Campbell, and W.C. Wheeler. 2005. Systematic review of the frog family Hylidae, with special reference to Hylinae: a phylogenetic analysis and taxonomic revision. *Bulletin of the American Museum of Natural History* 294: 1-240.
- França, F.G.R. and N.M. Venâncio. 2010. Reptiles and amphibians of a poorly known region in southwest Amazonia. *Biotemas* 23(3): 71-84.
- Frost, D.R. 2011. *Amphibian Species of the World: an Online Reference. Version 5.5*. Electronic Database accessible at <http://research.amnh.org/vz/herpetology/amphibia/> Captured on 2 September 2011.
- Pyburn, W. F. 1977. A new hylid frog (Amphibia, Anura, Hylidae) from the Vaupes river of Colombia with comments on related species. *Journal of Herpetology*, 11:405–410.
- Rodriguez, L.O. and W.E. Duellman. 1994. Guide to the frogs of the Iquitos region, Amazonian Peru. *The University of Kansas Natural History Museum Special Publication* 22: 1-80.
- Souza, M. and C.F.R. Gonzales. 2006. Amphibians and reptiles; p. 182–185 In C., Vriesendorp, T.S. Schulenberg, W.S. Alverson, D.K. Moskovits, J.I. Rojas-Moscoco (ed.). *Rapid biological inventory: Peru: Sierra del Divisor*. Chicago: Field Museum.
- Souza, M.B. 2009. *Anfíbios: Reserva Extrativista do Alto Juruá e Parque Nacional da Serra do Divisor, Acre*. Campinas: IFCH. 77p.

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